

Eastern Research Group 601 Keystone Park Drive Suite 700 Morrisville, NC 27560

January 03, 2019

Ms. Doris Chen & Lewis Weinstock U.S. Environmental Protection Agency - OAQPS 109 T.W. Alexander Drive, Mail Code: C304-06 RTP, NC 27709

Project Name: EtO Region 5

Dear Ms. Doris Chen & Lewis Weinstock,

This report contains the analytical results for the sample(s) received under chain(s) of custody by Eastern Research Group on 12/07/18 11:20.

The test results in this report are in compliance with NELAC accreditation requirements for the certified parameters. All analyses were performed as described in the US EPA-approved QAPP, under the contract for UATMP, NATTS, CSATAM, PAMS and NMOC support (US EPA Contract No. EP-D-14-030). This cover page is an integral part of this report, and any exceptions or comments are noted on the last page.

Release of the data contained in this data package and in the data submitted in the electronic data deliverable, has been authorized by the Program Manager, or the Program Manager's designee as verified by the following signature.

The issuance of the final Certificate of Analysis takes precedence over any previous Report. If you have any questions, please contact me at 919-468-7924.

Sincerely,

Julie Swift
Program Manager
julie.swift@erg.com

The information contained in this report and its attachment(s) are intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential, or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this report is strictly prohibited. If you have received this report in error, please notify julie.swift@erg.com and delete the report without retaining any copies.

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U.S. Environmental Protection Agency - OAQPS

109 T.W. Alexander Drive, Mail Code: C304-C

RTP, NC 27709

ATTN: Ms. Doris Chen & Lewis Weinstock

PHONE: (919) 541-4957 FAX: -

FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
Grover MS	8120701-01	Air	12/02/18 09:29	12/07/18 11:20
EPA WB Warehouse	8120701-02	Air	12/02/18 09:12	12/07/18 11:20
Hindale South HS	8120701-03	Air	12/02/18 09:55	12/07/18 11:20
Willow Pond Park	8120701-04	Air	12/02/18 09:46	12/07/18 11:20
West Neighborhood	8120701-05	Air	12/02/18 10:10	12/07/18 11:20
Water Tower	8120701-06	Air	12/02/18 09:37	12/07/18 11:20
Gower ES	8120701-07	Air	12/02/18 10:03	12/07/18 11:20
WB Village Hall C1	8120701-08	Air	12/02/18 09:17	12/07/18 11:20
WB Village Hall C2	8120701-09	Air	12/02/18 09:18	12/07/18 11:20
West Neighborhood	8120701-10	Air	11/26/18 10:30	12/07/18 11:20

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REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

 Description:
 Grover MS
 Lab ID:
 8120701-01
 Sampled: 12/02/18 09:29

 Pressure @ Receipt:
 3.50" Hg
 Canister #:
 A22244
 Received: 12/07/18 11:20

 Comments:
 Probe #10311 Start 09:33 12/01/18
 Analyzed: 12/21/18 15:33

Air Toxics by EPA Compendium Method TO-15

 Analyte
 ppbv
 ug/m³
 Flag
 ppbv

 Ethylene oxide
 ND
 ND
 U
 0.0453

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FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: EPA WB Warehouse Lab ID: 8120701-02 **Sampled:** 12/02/18 09:12 Pressure @ Receipt: 3.50" Hg Canister #: 161 **Received:** 12/07/18 11:20 **Comments:** Probe # 10314 Start 09:11 12/1/18 **Analyzed:** 12/21/18 16:35

Air Toxics by EPA Compendium Method TO-15

Results

Flag

MDL

Ethylene oxide

Analyte

ppbv ug/m³ 0.256

0.46

ppbv 0.0453

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FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

 Description:
 Hindale South HS
 Lab ID:
 8120701-03
 Sampled: 12/02/18 09:55

 Pressure @ Receipt:
 7.00" Hg
 Canister #:
 5135
 Received: 12/07/18 11:20

 Comments:
 Probe # 10076 Start 10:18 12/1/18
 Analyzed: 12/21/18 17:37

Air Toxics by EPA Compendium Method TO-15

<u>Results</u>

MDL

Analyte
Ethylene oxide

ppbv ug/m³ 0.416 0.75 <u>Flag</u>

ppbv 0.0453

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109 T.W. Alexander Drive, Mail Code: C304-C

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Analyte

Ethylene oxide

ATTN: Ms. Doris Chen & Lewis Weinstock

PHONE: (919) 541-4957 FAX: -

FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

 Description:
 Willow Pond Park
 Lab ID:
 8120701-04
 Sampled: 12/02/18 09:46

 Pressure @ Receipt:
 4.50" Hg
 Canister #:
 082
 Received: 12/07/18 11:20

 Comments:
 Probe # 10294 Start 09:57 12/1/18
 Analyzed: 12/21/18 18:37

Air Toxics by EPA Compendium Method TO-15

 Results
 MDL

 ppbv
 ug/m³
 Flag
 ppbv

 ND
 ND
 U
 0.0453

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FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

 Description:
 West Neighborhood
 Lab ID:
 8120701-05
 Sampled: 12/02/18 10:10

 Pressure @ Receipt:
 5.00" Hg
 Canister #:
 EPO92
 Received: 12/07/18 11:20

 Comments:
 Probe # 10310 Start 10:43 12/1/18
 Analyzed: 12/21/18 19:39

Air Toxics by EPA Compendium Method TO-15

<u>Results</u>

MDL

Analyte
Ethylene oxide

ppbv ug/m³
0.474 0.86

Flag ppbv 0.0453

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ATTN: Ms. Doris Chen & Lewis Weinstock

PHONE: (919) 541-4957 FAX: -

Pressure @ Receipt: 3.50" Hg

Description: Water Tower

FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Lab ID: 8120701-06 Sampled: 12/02/18 09:37 Canister #: 406 **Received:** 12/07/18 11:20 **Comments:** Probe # 10312 Start 09:45 12/1/18 Analyzed: 12/21/18 20:39

Air Toxics by EPA Compendium Method TO-15

MDL Results Analyte ppbv ug/m³ Flag ppbv Ethylene oxide ND 0.0453

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Analyte

ATTN: Ms. Doris Chen & Lewis Weinstock

PHONE: (919) 541-4957 FAX: -

FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: Gower ES Lab ID: 8120701-07 **Sampled:** 12/02/18 10:03 Pressure @ Receipt: 5.50" Hg Canister #: 061 **Received:** 12/07/18 11:20 **Comments:** Probe # 10293 Start 10:31 12/1/18 Analyzed: 12/21/18 21:39

Air Toxics by EPA Compendium Method TO-15

Results

0.46

MDL Flag

ppbv ug/m³ Ethylene oxide 0.257

ppbv 0.0453

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PHONE: (919) 541-4957 FAX: -

FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: WB Village Hall C1 Lab ID: 8120701-08 Sampled: 12/02/18 09:17 Pressure @ Receipt: 3.50" Hg Canister #: SAT079 **Received:** 12/07/18 11:20 **Comments:** Col 1 Probe # 10313 Start 09:21 12/1/18 **Analyzed:** 12/21/18 22:41

Air Toxics by EPA Compendium Method TO-15

Results

<u>MDL</u> Flag ppbv

Analyte ppbv ug/m³ Ethylene oxide 0.931 1.68 0.0453

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FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

 Description:
 WB Village Hall C2
 Lab ID:
 8120701-09
 Sampled: 12/02/18 09:18

 Pressure @ Receipt:
 5.50" Hg
 Canister #: 101
 Received: 12/07/18 11:20

 Comments:
 Col 2 Probe # 10315 Start 09:21 12/1/18
 Analyzed: 12/21/18 23:43

Air Toxics by EPA Compendium Method TO-15

0.0453

Results

MDL g ppbv

Analyte ppbv ug/m³ Flag
Ethylene oxide 1.05 1.90

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ATTN: Ms. Doris Chen & Lewis Weinstock

PHONE: (919) 541-4957 FAX: -**Description:** West Neighborhood

Pressure @ Receipt: 4.50" Hg

FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Lab ID: 8120701-10 **Sampled:** 11/26/18 10:30 Canister #: 5034 **Received:** 12/07/18 11:20 **Comments:** Probe # 10310 Start 10:25 11/25/18 Analyzed: 12/22/18 02:47

Air Toxics by EPA Compendium Method TO-15

<u>MDL</u> Results ppbv ug/m³ Flag

Analyte ppbv Ethylene oxide ND 0.0453

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FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes

Air Toxics by EPA Compendium Method TO-15 - Quality Control

Batch B8L2103 - Summa Canister Prep

Prepared: 12/18/18 Analyzed: 12/21/18 Blank (B8L2103-BLK1) Ethylene oxide ND ppbv H Prepared: 12/02/18 Analyzed: 12/22/18 Duplicate (B8L2103-DUP3) Source: 8120701-08 Ethylene oxide 0.930 ppbv 0.172 25 Prepared: 12/02/18 Analyzed: 12/22/18 Duplicate (B8L2103-DUP4) Source: 8120701-09 1.05 Ethylene oxide 1.02 2.87 25

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FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Analyte Result Units % Difference Limit (%) Notes

Air Toxics by EPA Compendium Method TO-15 - Quality Control

Sequence 1812046

Calibration Check (1812046-CCV1) Prepared & Analyzed: 12/21/18

Ethylene oxide 2.10 ppbv -16.1 30.00

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FILE #: 0344.00

REPORTED: 01/03/19 11:45

SUBMITTED: 12/07/18

AQS SITE CODE:

SITE CODE: EtO Region 5

Notes and Definitions

U Under Detection Limit
ND Analyte NOT DETECTED

NR Not Reported

MDL Method Detection Limit
RPD Relative Percent Difference

Note: The test results meet all requirements of NELAC; however the following analytes are not accredited: 1,2,4-trimethylbenzene, 1,2-dibromoethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-butadiene, acetylene, acrolein, bromochloromethane, bromodichloromethane, bromoform, carbon disulfide, dibromochloromethane, dichlorodifluoromethane, dichlorotetrafluoroethane, ethyl tert butyl ether, ethylene oxide, hexachloro-1,3-butadiene, octane, propylene, tert amyl methyl ether, tetrachloroethylene, tran-1,2-dichloroethylene, trchlorofluoromethane, and trichlorotrufluoroethane.

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